

WHAT IS CLAIMED IS:

1. A data transfer apparatus for outputting a data group having data represented by plural bits to predetermined processing means, comprising:

5 detection means for detecting a maximum value in the data group as a transfer object; and

 specifying means for specifying a non-zero highest-order bit position among bits constructing the maximum value detected by said detection means,

10 wherein a bit in a position higher than said highest-order bit position specified by said specifying means is omitted from processing by said predetermined processing means.

15 2. A data transfer apparatus for outputting a data group having data represented by plural bits to predetermined processing means, comprising:

 calculation means for performing logical OR calculation on all the data group to be transferred; and

20 specifying means for specifying a non-zero highest-order bit position among bits constructing the result of the logical OR calculation by said calculation means,

 wherein a bit in a position higher than said
25 highest-order bit position specified by said specifying means is omitted from processing by said predetermined processing means.

3. A data transfer apparatus for outputting a data group having data represented by plural bits to predetermined processing means, comprising:

- 5 calculation means for performing logical OR calculation on all the data group to be transferred; and specifying means for specifying a non-zero lowest-order bit position among bits constructing the result of the logical OR calculation by said calculation means,
- 10 wherein a bit in a position lower than said lowest-order bit position specified by said specifying means is omitted from processing by said predetermined processing means.

- 15 4. A data transfer apparatus for outputting a data group having data represented by plural bits to predetermined processing means, comprising:

- calculation means for performing logical OR calculation on all the data group to be transferred; and
- 20 specifying means for specifying a non-zero highest-order bit position and a non-zero lowest-order bit position among bits constructing the result of the logical OR calculation by said calculation means,
- wherein a bit in a position lower than said
- 25 lowest-order bit position and a bit in a position higher than said highest-order bit position specified by said specifying means are omitted from processing by said

predetermined processing means.

5 5. The data transfer apparatus according to claim 1,
 wherein said predetermined processing means is a coding
 processor circuit.

10 6. The data transfer apparatus according to claim 1,
 wherein said data transfer apparatus includes a DMA
 circuit.

15 7. The data transfer apparatus according to claim 1,
 wherein said data group includes pixel data or transform
 coefficients generated by transform coding on the pixel
 data.

20 8. A data transfer method for outputting a data group
 having data represented by plural bits to predetermined
 processing means, comprising:

 a detection step of detecting a maximum value in
 the data group as a transfer object; and

 a specifying step of specifying a non-zero
 highest-order bit position among bits constructing the
 maximum value detected at said detection step,

 wherein a bit in a position higher than said
25 highest-order bit position specified at said specifying
 step is omitted from processing by said predetermined
 processing means.

9. A data transfer method for outputting a data group having data represented by plural bits to predetermined processing means, comprising:

- 5 a calculation step of performing logical OR calculation on all the data group to be transferred; and
 a specifying step of specifying a non-zero highest-order bit position among bits constructing the result of the logical OR calculation at said calculation
10 step, .

 wherein a bit in a position higher than said highest-order bit position specified at said specifying step is omitted from processing by said predetermined processing means.

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10. A data transfer method for outputting a data group having data represented by plural bits to predetermined processing means, comprising:

- a calculation step of performing logical OR
20 calculation on all the data group to be transferred; and
 a specifying step of specifying a non-zero lowest-order bit position among bits constructing the result of the logical OR calculation at said calculation step,

 wherein a bit in a position lower than said
25 lowest-order bit position specified at said specifying step is omitted from processing by said predetermined processing means.

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11. A data transfer method for outputting a data group having data represented by plural bits to predetermined processing means, comprising:

- 5 a calculation step of performing logical OR calculation on all the data group to be transferred; and
- a specifying step of specifying a non-zero highest-order bit position and a non-zero lowest-order bit position among bits constructing the result of the
- 10 logical OR calculation at said calculation step,
- wherein a bit in a position lower than said lowest-order bit position and a bit in a position higher than said highest-order bit position specified at said specifying step are omitted from processing by said
- 15 predetermined processing means.

12. The data transfer method according to claim 8, wherein said data transfer method includes a data transfer method in a DMA circuit.